

**CLEAN COAL STUDY GROUP**  
**Friday, December 2, 2005**  
**10 am – 3:50 pm**  
**PSC**  
**Amnicon Falls Hearing Room**

**MINUTES**

**Participants:**

See Attachment A

**Discussion:**

1. Co-Chairman Al Shea called the meeting to order and introduced three members of the Study Group who were not able to attend the first meeting: Kim Zuhlke of Alliant Energy, Bill Ward of Procter and Gamble, and Bruce Nilles of the Sierra Club. 45 people signed in attendance, not including staff of the PSC.
2. Co-Chairman Shea asked for comments on the minutes from the October 14, 2005 meeting. No comments were offered from the group, and the minutes were considered approved.
3. Co-Chairman Shea then referred to the Study Scope document and asked if there were any additional comments on the Guiding Questions. Comments had already been received and incorporated from several group members. With no additional comments from the group, the Guiding Questions as provided for this meeting were considered final.
4. The next meeting, scheduled for Friday, January 13, 2006, will be a trip to the Wabash River IGCC facility in Terre Haute, Indiana. Indiana Commissioner David Hadley is scheduled to speak with the group and join the tour of the facility. Public Service of Indiana may also join the discussion, particularly as it relates to operating an IGCC-based unit in the MISO market.
5. Co-Chairman Meyer briefly reviewed the expected process and desired outcome for the group. The final report will be produced by staff, analyzing data from the presentations and summarizing stakeholder discussions. The report will incorporate both pro and con viewpoints and will provide a menu of options for policy direction. This approach is necessary for Co-Chairman Meyer, as a Public Service Commissioner, to avoid conflicts of interest in future power plant construction cases that may come to the PSC. As a part of the process, a comment period will be included after the issuance of the draft report and before it is finalized.

6. The remainder of the meeting was composed of four presentations on IGCC technology and implementation.<sup>1</sup> As parts of their presentations, the speakers attempted to address the “guiding questions” as delineated in the Group’s Study Scope. All four presentations included opportunities for Study Group members to ask questions.
  - a. The first presentation, by Stu Dalton of EPRI, was held with Mr. Dalton over the telephone, assisted by Dan Bartell of EPRI, with a slide presentation in the room. The presentation provided an overview of the country’s generation capacity and coal supply, the status of clean coal technologies, and the current situation of existing IGCC plants in terms of availability, reliability, ability to be adapted for CO<sub>2</sub> capture, ability to control mercury emissions, and other aspects of environmental performance.
  - b. A second presentation was given by Norman Shilling of GE Power Systems and Lee Schmoe of Bechtel Corporation. These two companies have allied to provide a product combining GE product development experience with Bechtel technology delivery capabilities. The keystone of the alliance is a 600 MW IGCC “reference plant” offering. Details were given illustrating the various aspects of the plant and the partnership, fitting their product to Wisconsin, and describing IGCC incentive programs implemented in Illinois and Indiana.
  - c. A third presentation was given by Conrad Anderson of Madison Power Corporation. In his presentation, he described Madison Power’s work on IGCC projects, noting that a preferred site for an IGCC plant would be an existing, old coal plant to be repowered. He also suggested a competitive process that could be used to implement IGCC in Wisconsin, where real values would be assigned to emission reductions and the final decision point would be comparing guaranteed \$/MWh.
  - d. A fourth presentation was given by Phil Amick of ConocoPhillips.<sup>2</sup> CP has a reference plant set-up similar to that of GE/Bechtel, and its characteristics were described. Although EPACT subsidies look useful, enough for maybe 35 projects if fully funded, Mr. Amick pointed out that Wisconsin is “behind” in acting on it even though an IGCC would fit into Wisconsin’s community and climate. He commented that Wisconsin’s recent actions appear to have discouraged new IGCC development and investment, mentioning that the Wabash plant’s 1993 air permit is cleaner than that for the SCPC plant recently permitted at Elm Road.

7. The meeting was adjourned at 3:50 p.m.

### **Next Steps:**

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<sup>1</sup> Copies of the presentations from this meeting can be found in the PSC website, at <http://psc.wi.gov/CleanCoal/meetings.htm>.

<sup>2</sup> The presentation from Phil Amick has not been added to the site as of the drafting of these minutes.

- Members will make arrangements as appropriate to participate in the tour of the Wabash IGCC facility on January 13, 2006.

**Next Meeting: Friday, January 13th at the Wabash River facility in Terre Haute, Indiana.**

**Attachment A**  
**Meeting Attendance**

Phil Amick	ConocoPhillips
Conrad Anderson	Madison Power
Dan Bartel	Electric Power Research Institute
Jeff Block	Madison Gas and Electric Company
Catherine Boies	Public Service Commission of Wisconsin
Sanya Carleyolsen	UW-Madison
Lee DeBaillie	Energy Center of Wisconsin
Steve Derenne	WE Energies
Ken Detmer	Public Service Commission of Wisconsin
David Donovan	Xcel Energy
Phyllis Dube	WE Energies
Dave Harpole	Wisconsin Public Service Corporation
David Hawkins	Natural Resources Defense Council
Alice Heilman	Public Service Commission of Wisconsin
Bruce Hensel	Natural Resource Technologies
Charlie Higley	Citizens Utility Board
Neil Howell	Department of Administration Division of State Facilities
Lois Hubert	Public Service Commission of Wisconsin
Erhard Joeres	University of Wisconsin Professor Emeritus
Joan Knoebel	League of Women Voters
Dennis Koepke	Public Service Commission of Wisconsin
Heather Leibham	We Energies
Shannon Loreda	Calpine Corporation
Sara Ludtke	Wisconsin Public Power Inc.
Mike Malloy	AZCO Inc.
Jim Mapp	Wisconsin Department of Administration
Wayne Merkovich	Utility Workers Coalition
Mark Meyer	Public Service Commission of Wisconsin
Scott Neitzel	Madison Gas and Electric Company
Bruce Nilles	Sierra Club
Randy Pilo	Public Service Commission of Wisconsin
Mark Redsten	Clean Wisconsin
Keith Reopelle	Clean Wisconsin
Ken Rineer	Public Service Commission of Wisconsin
Brian Rude	Dariyland Power Cooperative
Joseph Rude	UW-Madison
Melody Sakazaki	Energy Center of Wisconsin
Lee Schmoe	Bechtel
Rod Sears	CPE
Al Shea	Wisconsin Department of Natural Resources
Norm Shilling	GE
Marty Smith	Xcel Energy
David Siebert	Wisconsin Department of Natural Resources

Marilyn Slautterback

Peter Steitz

Susan Stratton

John Sumi

John Thompson

Phil Uekert

Kevin Vesperman

Bill Ward

Megan Wisersky

Kim Zuhlke

League of Women Voters

Wisconsin Public Power Inc

Energy Center of Wisconsin

Customer First! Coalition

Clean Air Task Force

Wisconsin Public Service Corporation

Alliant Energy

Procter and Gamble

Madison Gas and Electric Company

Alliant Energy